Case 3035

Trachelocerca Ehrenberg (Ciliophora): proposed conservation of authorship as Ehrenberg (1840), with fixation of *Vibrio sagitta* Müller, 1786 as the type species

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Abstract. The purpose of this application is the conservation of the generic name *Trachelocerca* Ehrenberg, 1840, in use for marine ciliates which have non-dividing macronuclei and belong to the group called Karyorelictea by Corliss (1994). *Trachelocerca* in this sense has *Vibrio sagitta* Müller, 1786 as the type species by monotypy. Recent workers have overlooked that six years earlier Ehrenberg [1834] had used the name *Trachelocerca* in a sense which would make it a junior synonym of *Lacrymaria* Bory de St. Vincent, [1824], a name in use for freshwater ciliates belonging to a different group. It is proposed that the earlier [1834] usage of *Trachelocerca* should be suppressed.

Keywords. Nomenclature; taxonomy; Protozoa; Ciliophora; Karyorelictea; *Trachelocerca*; *Trachelocerca sagitta*; *Lacrymaria*; marine ciliates.

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1. Ehrenberg ([1834], p. 316) erected the freshwater protozoan genus *Trachelocerca* with three nominal species: *Vibrio olor* Müller, 1786 (p. 75) and the new species *T. biceps* and *T. viridis*. No type species was fixed. Bory de St. Vincent ([1824], p. 479) had earlier placed *V. olor* in his own new genus *Lacrymaria*, and in 1875 it was designated as the type species of that genus by Fromentel (p. 174). *T. biceps* is, according to our modern understanding of ciliate morphology, not a distinct species but a monster form of *Lacrymaria* sp., as indeed supposed possible by Ehrenberg ([1834]). *T. viridis* is closely related to *L. olor* but differs in having symbiotic algae; Kent (1881, p. 515) considered it to be a variety of *L. olor* and this has never been disputed, although there is no recent information about this species.

2. Ehrenberg (1840, p. 202) placed *Vibrio sagitta* Müller, 1786 (p. 59) in the nominal genus *Trachelocerca*. In doing this he mentioned neither any other species nor his previous use of the name *Trachelocerca*; he repeated Müller's diagnosis of *V. sagitta* and stated that it was marine (found in the Baltic and North Seas). Had *Trachelocerca* not been published in 1834 it would be available from Ehrenberg (1840), with *V. sagitta* as the type species by monotypy. The genus was treated in this way by Stein (1859, pp. 72, 80), but other workers used *Trachelocerca* in different and often vague senses (see Foissner & Dragesco, 1996, pp. 45–46).

3. Kahl (1930) and Dragesco (1960) both cited Ehrenberg (1840) as the author of *Trachelocerca*, unaware that Ehrenberg had originally established the name six years earlier. Kahl did not mention a type species, but Dragesco (p. 110) designated *Trachelocerca entzi* Kahl, 1927 as the type; this is invalid since the species was of course never included in the genus by Ehrenberg. Kahl's species does not belong to the same group (the Karyorelictea; Corliss, 1974, 1994) as *T. sagitta* (see Foissner, 1997).

4. Delphy (1939) split *Trachelocerca* into four genera, deliberately but unjustifiably citing Cohn (1866) as the author of the genus, and invalidly designated *T. phoenicopterus* Cohn, 1866 as the type species. Cohn himself (p. 264) had cited Ehrenberg (1840) as the author of *Trachelocerca*. Dragesco (1960, p. 120) designated *T. phoenicopterus* as the type species of his new genus *Tracheloraphis*.

5. Foissner & Dragesco (1996) gave Ehrenberg (1840) as the author of *Trachelocerca* and *Vibrio sagitta* Müller, 1786 as the type species by monotypy (cf. para. 2 above). Like the other authors mentioned above they overlooked the fact that *Trachelocerca* had been published by Ehrenberg in 1834, with different included species. Foissner & Dragesco thoroughly redescribed and illustrated *T. sagitta* from the French Atlantic coast, together with other species.

6. *Trachelocerca* is well established in modern ciliate literature as comprising exclusively marine species with uniquely non-dividing diploid macronuclei, like *T. sagitta* (see for example Dragesco, 1960; Corliss, 1979; Foissner & Dragesco, 1996).

7. If *Trachelocerca* were to be taken from Ehrenberg ([1834]) it would fall as a junior subjective synonym of *Lacrymaria* Bory de St. Vincent, 1824, a genus also well established in current literature but for a very different group of species (see Corliss, 1979). *Trachelocerca* Ehrenberg, 1840, always used in recent decades for species related to *Vibrio sagitta* Müller, 1786, could be replaced by the junior subjective synonyms *Gruvelina* or *Nephrocerca*, both of Delphy (1939), but this would involve changes in many well established ciliate names.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the generic name *Trachelocerca* Ehrenberg, [1834] and all uses of that name prior to its publication by Ehrenberg (1840) for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Trachelocerca* Ehrenberg, 1840 (gender: feminine), type species by monotypy *Vibrio sagitta* Müller, 1786;

(3) to place on the Official List of Specific Names in Zoology the name *sagitta* Müller, 1786, as published in the binomen *Vibrio sagitta* (specific name of the type species of *Trachelocerca* Ehrenberg, 1840);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Trachelocerca* Ehrenberg, [1834], as suppressed in (1) above.

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